

Title (en)
METHOD AND CELL FOR CONVERSION OF DINITROGEN INTO AMMONIA

Title (de)
VERFAHREN UND ZELLE ZUR UMWANDLUNG VON DISTICKSTOFF IN AMMONIAK

Title (fr)
PROCÉDÉ ET CELLULE DE CONVERSION DE DIAZOTE EN AMMONIAC

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Application
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Abstract (en)
[origin: WO2017132721A1] The invention relates to a method and an electrochemical cell comprising a cathodic working electrode comprising a nanostructured catalyst, a counter electrode and an electrolyte for the reduction of dinitrogen to ammonia. The invention includes introducing dinitrogen and a source of hydrogen to the electrolyte, wherein the dinitrogen is reduced to ammonia at the cathodic working electrode. The electrolyte comprises one or more liquid salts formed from the combination of a specified set of cations and a specified set of anions.

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Citation (search report)
• [Xl] WO 2015009155 A1 20150122 - UNIV DELFT TECH [NL]
• [Xl] TED M PAPPENFUS ET AL: "Wind to Ammonia: Electrochemical Processes in Room Temperature Ionic Liquids", ECS TRANSACTIONS, ELECTROCHEMICAL SOCIETY, US, vol. 16, no. 49, 2009, pages 89 - 93, XP009177418, ISSN: 1938-5862, DOI: 10.1149/1.3159311
• See references of WO 2017132721A1

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